What is Claimed is:

1. A method for curing one or more parts, comprising:

determining, for each evaluator of a plurality of evaluators, a part curing predictive effectiveness;

wherein for each of said evaluators (E), said step of determining determines, for a plurality of curing conditions, a correspondence between (a1) and (a2) following:

(a1) outputs by the evaluator E, wherein for each curing condition (CC_j) of the curing conditions, there is a portion of the outputs obtained when the evaluator E is provided with a corresponding activation input that includes a sequence of impedance responses from a device providing signals indicative of impedance measurements of a rubber compound (RC), wherein the rubber compound RC is being cured:

(i) according to the curing condition CC_j; and

(ii) in curing equipment that is also to be used in curing the part, and

(a2) for each curing condition (CC_k) of the curing conditions, a known curing time[DJD3] of a rubber compound for the curing condition CC_k;

providing, for each of a plurality of predetermined frequencies, an electrical current to the device, wherein the device outputs signals indicative of impedance measurements for a rubber compound from which the part is being formed in the curing equipment;

receiving, for each of said frequencies, an impedance data stream including a sequence of impedance responses from said device during the curing of the part;

for each of one or more of the curing evaluators, activating the evaluator for obtaining a corresponding result related to a prediction of a cure time of the part, when the evaluator is provided with a corresponding activation input from said impedance data streams;

using the corresponding results from the one or more evaluators for obtaining a predicted cure time for the part;

wherein a step of identifying is performed prior to said step of using, and said step of identifying identifies at least one of the evaluators (E_I) for predicting a cure time for the part, wherein the predictive effectiveness for E_I is better than the predictive effectiveness of at least one other of the evaluators.

2. The method of Claim 1, wherein each of the curing conditions includes at least a curing temperature, and an identifier for identifying a particular batch from which the rubber compound RC is obtained.

3. The method of Claim 1, wherein for each of the evaluators, the corresponding activation input includes a predetermined segment of an entire impedance data stream indicative of the impedance measurements of the rubber compound RC in response to a particular frequency being input to the device.

4. The method of Claim 1, wherein said particular frequency is approximately one of the predetermined frequencies.

5. The method of Claim 1, wherein the rubber compound includes a rubber polymeric compound.

6. The method of Claim 1, wherein said curing equipment includes at least one of: an injection molding equipment, a compression molding equipment, a transfer molding equipment, a belt press, and an autoclave.

7. The method of Claim 1, wherein the rubber compound includes at least one of: styrene-butadiene, polybutadiene, polyisoprene, ethylene-propylene, butyl, halobutyl, nitrile, polyacrylic, neoprene, hypalon, silicone, fluorcarbon elastomers, polyurethane elastomers, natural rubber and hydrogenated nitrile-butadiene rubber.

8. The method of Claim 1, wherein for each curing condition (CC) of at least most of the curing conditions, the rubber compound RC of (a1) for CC, and the rubber compound of (a2) for CC are from a same rubber compound batch.

9. The method of Claim 1, wherein a rubber compound cured for creating the part substantially has each of its constituent ingredients in a range of some instance of the rubber compound RC corresponding with one of the curing conditions CC_j.

10. The method of Claim 1, wherein each known curing time is indicative of an elapsed time for curing the rubber compound for curing condition CC_k to a predetermined elastic torque value.

11. The method of Claim 10, wherein each known curing time is indicative of an elapsed time for curing the rubber compound for curing condition CC_k to a percentage of a maximum elastic torque.

12. The method of Claim 1, wherein said determining step includes performing a statistical correlation between the outputs of (a1), and the curing times of (a2).

13. The method of Claim 1, wherein the known curing times of (a2) are determined using a rheometer.

14. The method of Claim 1, wherein at least one of the evaluators determines one of: (1) a maximum impedance value, (2) a time value for a maximum impedance, (3) a time value for a minimum impedance, (4) a value indicative of an area under a graph of a series of impedance values, (5) a slope obtained from a series of impedance values, (6) a dampening coefficient of a curve fitted to a series of impedance values, and (7) an amplitude coefficient of a curve fitted to a series of impedance values.

15. The method of Claim 14, wherein at least most of (1) through (7) are determined by the evaluators.

16. The method of Claim 1, wherein at least a majority of the plurality of predetermined frequencies are in a range of 10 hz to 5 Mhz.

17. The method of Claim 1, wherein the number of different frequencies of the plurality of predetermined frequencies can be greater than or equal to 4.

18. The method of Claim 1, wherein said device includes at least one of: a non-bridged dielectric or impedance measurement circuit, and a voltage divider circuit for determining the impedance responses of (a1).

19 The method of Claim 18, wherein said device determines the impedance responses of (a1) substantially from an output from the non-bridged dielectric or impedance measurement circuit.

20 The method of Claim 18, wherein said device determines the impedance responses of (a1) substantially from an output from the voltage divider circuit.

21. The method of Claim 1, wherein an electrode is operatively connected to the curing equipment and the device, wherein the impedance measurements and the impedance responses are indicative of responses from a capacitor formed using the electrode and a sample of the rubber

22. The method of Claim 1, further including a step of dividing at least one of the impedance data streams into a plurality of segments.

23. The method of Claim 1, wherein for at least of the evaluators, its corresponding activation input is one of the segments.

24. The method of Claim 1, wherein said step of using includes combining the corresponding results from at least two evaluators.

25. The method of Claim 24, wherein said combining step includes providing the corresponding results from the at least two evaluators to a predetermined multiple regression equation.

26. The method of Claim 1, wherein said identifying step includes correlating the output of (a1) for the evaluator E_1 with the known curing times of (a2).

27. The method of Claim 1, further including the step of:

selecting the outputs of (a1) for each of a subset of the evaluators and their corresponding activation inputs;

combining the selected outputs in each of a plurality of combinations; and

determining at least one of the combinations having a predictive effectiveness that is better than the predictive effectiveness of at least one of the evaluators.

28. The method of Claim 27, wherein said selecting step includes choosing for the outputs of (a1) that are correlate better with the known curing times of (a2) than the outputs of (a1) that are not chosen.

29. The method of Claim 27, wherein said combining step includes:

obtaining a value indicative of a maximum number of the outputs to be provided in each of the combinations.

30. The method of Claim 27, wherein said determining at least one of the combinations includes performing a multiple regression of at least some of the combinations against the known curing times of (a2).